

# **METHOD AND APPARATUS FOR IDENTIFYING AN IDENTICAL CELL IN AN IC LAYOUT WITH AN EXISTING SOLUTION**

## **ABSTRACT**

One embodiment of the invention provides a system for speeding up processing of a layout of an integrated circuit that has been divided into cells. The system operates by determining if a target cell in the layout is identical to a preceding cell for which there exists a previously calculated solution by comparing an identifier created from the target cell with an identifier created from the preceding cell. If the target cell is identical to a preceding cell, the system uses the previously calculated solution as a solution for the target cell. Otherwise, if the target cell is not identical to the preceding cell, the system processes the target cell to produce the solution for the target cell. Note that this approach can also be used for a number of different processes, such as distributed fracturing or optical proximity correction.